IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF PENNSYLVANIA

EMCORE CORPORATION, JDS UNIPHASE CORPORATION,)
Plaintiffs,)
VS.	Civil Action No. 6-1202
OPTIUM CORPORATION,)
Defendant.)

AMBROSE, Chief District Judge

OPINION and ORDER OF COURT

SYNOPSIS

Defendant, Optium Corporation, filed a Motion for Partial Summary Judgment. (Doc. No. 189). Plaintiffs, Emcore Corporation and JDS Uniphase Corporation, responded thereto and in support thereof Plaintiffs offered the declaration of Dr. David A. Smith. (Doc. No. 224). Thereafter, Defendant filed a Motion to Strike the declaration of Dr. Smith. (Doc. No. 232). The briefing regarding the both Motions is complete. After careful consideration of the submissions of the parties, Defendant's Motion to Strike (Doc. No. 232) is denied, and Defendant's Motion for Summary Judgment (Doc. No. 189) is granted in part and denied in part as set forth below.

OPINION

I. BACKGROUND

Plaintiffs, Emcore Corporation and JDS Uniphase Corporation allege, *inter alia*, that Defendant, Optium Corporation ("Optium"), has infringed claims of U.S. Patent Nos. 6,282,003 (the '003 patent) and 6,490.071 (the '071 patent), both titled "Method and Apparatus for Optimizing

SBS¹ Performance in an Optical Communication System Using at Least Two Phase Modulation Tones." The '003 patent issued from Application No. 09/017,182 on August 28, 2001. The '071 patent issued from a continuation of the '812 application on December 3, 2002. The '003 and '071 patents issued to Ronald T. Logan, Jr. and Ruo Ding Li, and were assigned to JDS Uniphase Corporation.

On May 31, 2007, Special Master Gale R. Peterson conducted a *Markman* hearing. (Docket No. 71). On July 2, 2007, Special Mater Peterson issued a Report and Recommendation on Claims Construction. (Docket No. 76). On August 10, 2007, I adopted the same in its entirety. (Docket No. 86).

On December 10, 2007, Optium filed a Motion for Partial Summary Judgment. (Docket No. 189). Plaintiffs, Emcore Corp. and JDS Uniphase Corp., responded thereto and in support thereof Plaintiffs offered the declaration of Dr. David A. Smith. (Doc. No. 224). On January 17, 2008, Optium filed a Motion to Strike the Declaration of David A. Smith. (Docket No. 232). The issues are ripe for review.

II. LEGAL ANALYSIS

A. Standard of Review

Summary judgment may only be granted if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(c). Rule 56 mandates the entry of summary judgment, after adequate time for discovery and upon motion, against the party who fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial. *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986).

¹SBS stands for Stimulated Brillouin Scattering.

In considering a motion for summary judgment, this Court must examine the facts in a light most favorable to the party opposing the motion. *International Raw Materials, Ltd. v. Stauffer Chemical Co.*, 898 F.2d 946, 949 (3d Cir. 1990). The burden is on the moving party to demonstrate that the evidence creates no genuine issue of material fact. *Chipollini v. Spencer Gifts, Inc.*, 814 F.2d 893, 896 (3d Cir. 1987). The dispute is genuine if the evidence is such that a reasonable jury could return a verdict for the non-moving party. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). A fact is material when it might affect the outcome of the suit under the governing law. *Id.* Where the non-moving party will bear the burden of proof at trial, the party moving for summary judgment may meet its burden by showing that the evidentiary materials of record, if reduced to admissible evidence, would be insufficient to carry the non-movant's burden of proof at trial. *Celotex*, 477 U.S. at 322.

Once the moving party satisfies its burden, the burden shifts to the nonmoving party, who must go beyond its pleadings, and designate specific facts by the use of affidavits, depositions, admissions, or answers to interrogatories showing that there is a genuine issue for trial. *Id.* at 324. Summary judgment must therefore be granted "against a party who fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial." *White v. Westinghouse Electric Co.*, 862 F.2d 56, 59 (3d Cir. 1988), *quoting, Celotex*, 477 U.S. at 322. Furthermore, in antitrust litigation, "[t]o survive a motion for summary judgment, an antitrust plaintiff must produce economically plausible evidence supporting the elements of its claim." *Harrison Aire, Inc. v. Aerostar Intern., Inc.*, 423 F.3d 374, 380 (3d Cir. 2005); *citing, Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 588 (1986). "If the plaintiff's theory is economically senseless, no reasonable jury could find in its favor, and summary judgment should be granted." *Id., quoting, Eastman Kodak Co. v. Image Tech. Servs., Inc.*, 504 U.S. 451, 468-69 (1992).

B. DEFENDANT'S MOTION TO STRIKE

Defendant filed a Motion for Summary Judgment. (Docket No. 189). Plaintiffs filed various documents in opposition thereto including the declaration of Dr. David A. Smith. (Docket No. 224). Defendant filed a Motion to Strike said declaration. (Docket No. 232). Rule 56(e) of the Federal Rules of Civil Procedure provides as follows:

(e) Form of Affidavits; Further Testimony; Defense Required. Supporting and opposing affidavits shall be made on personal knowledge, shall set forth such facts as would be admissible in evidence, and shall show affirmatively that the affiant is competent to testify to the matters stated therein. Sworn or certified copies of all papers or parts thereof referred to in an affidavit shall be attached thereto or served therewith. The court may permit affidavits to be supplemented or opposed by depositions, answers to interrogatories, or further affidavits. When a motion for summary judgment is made and supported as provided in this rule, an adverse party may not rest upon the mere allegations or denials of the adverse party's pleading, but the adverse party's response, by affidavits or as otherwise provided in this rule, must set forth specific facts showing that there is a genuine issue for trial. If the adverse party does not so respond, summary judgment, if appropriate, shall be entered against the adverse party.

F.R.C.P. 56(e). Moreover "[a]n affidavit that is 'essentially conclusory' and lacking in specific facts is inadequate..." to defeat a motion for summary judgment. *Mandonado v. Ramirez*, 757 F.2d 48, 51 (3d Cir. 1985), *quoting Drexel Union Prescription Centers, Inc.*, 582 F.2d 781, 789-90 (3d Cir. 1978). *See, Schoch v. First Fidelity Bancorporation*, 912 F.2d 654, 657 (3d Cir. 1990); *Quiroga v. Hasbro, Inc.*, 934 F.2d 497, 500 (3d Cir. 1990), *cert. denied*, 502 U.S. 940 (1991). "Legal memoranda and oral argument are not evidence and cannot by themselves create a factual dispute sufficient to defeat a summary judgment motion." *Jersey Cent. Power & Light Co. v. Township of Lacey*, 772 F.2d 1103, 1109-10 (3d Cir. 1985).

Optium moves to strike the declaration of Dr. Smith for the following reasons:

- (1) The expert opinions in Dr. Smith's declaration are not supported by his expert report and were not subject to discovery by Optium;
- (2) Dr. Smith's declaration is a "supplemental expert report" submitted after the time for serving expert reports and the close of expert discovery; and

(3) Dr. Hall's supplemental expert report was struck by this Court on November 29, 2007, and the report of Dr. Smith is no different from Dr. Hall's report.

(Doc. No. 232, p. 2). In the alternative, Optium asks this court to reconsider its decision of November 29, 2007, striking Dr. Hall's report. *Id.* Therefore, Optium requests that I strike Dr. Smith's declaration as an improper supplemental expert report. (Doc. No. 233, p. 3).

In response, Plaintiffs argue that the Motion to Strike should be denied for the following reasons:

- (1) The Motion is untimely;
- (2) Dr. Smith's declaration does not raise new opinions and, therefore, is not a "supplemental expert report;" and
- (3) Allowing Dr. Smith's declaration is not grounds for reconsideration of the Exclusion of Dr. Hall's Supplemental Expert Report.

(Doc. No. 243). As to Plaintiffs' first argument, I agree with Plaintiffs that Optium should have raised the issue as soon as reasonably practicable after receiving the declaration. Its Motion was filed just under four weeks of receiving the declaration. However, I decline to strike it as untimely and will consider the motion.

To determine whether the declaration of Dr. Smith raises new opinions and is a supplemental expert report, I must engage in a comparison between the allegedly new opinions set forth in the declaration with the expert report. The first opinion Optium objects to as new is the following:

Using Optium's definition of 'empirical tuning' or the Special Master's definition, Optium does not establish its operational region by empirical tuning.

(Doc. No. 233, p. 2, *citing*, Smith Dec., Doc. 247, ¶4). In response, Plaintiffs point to Dr. Smith's Rebuttal Expert report to show that this statement is not new. (Doc. No. 247, p 1). Specifically, Plaintiffs point to pages 7-8 wherein Dr. Smith allegedly expresses his opinion on "empirical tuning." *Id.* Therein, Dr. Smith states the following:

B.6. I contend that Optium establishes an operational region of SBS suppression because Optium does not practice empirical tuning. Rather, Optium satisfies both non-empirical methods of establishing as described by the Court:

* * *

B.6.2 Optium additionally does not use empirical tuning as defined by the court because Optium establishes the operational region of SBS suppression over temperature using a computational method....

(Doc. No. 247-5, p. 7). Based on a comparison of the above, I do not find this declaration to be a new opinion. Therefore, this statement shall not be stricken.

The second opinion Optium objects to as new is the following:

Optium does not tune its transmitters by trial and error.

(Doc. No. 233, p. 2, *citing*, Smith Dec., Doc. 247, ¶5). To show that this statement is not new, Plaintiffs first point to Dr. Smith's Rebuttal Expert report wherein Dr. Smith opines that "the alternative to coarse trial and error laboratory tuning (what the Special Master referred to as empirical tuning) is fine laboratory tuning and, although Logan and Li's calculations provide guidance, such mathematical calculations do not substitute for laboratory testing in order to establish the operational values of tone powers to achieve a desired level of SBS suppression." (Doc. No. 247-5, p. 5). Additionally, Plaintiffs point to sections of Dr. Smith's first Expert Report (Doc. No. 247-3, pp. 13-14). Finally, Plaintiffs suggest that this one statement should be read in context. In doing so, Plaintiffs argue that Dr. Smith explains the aforementioned statement, which is supported by Dr. Smith's expert reports. (Doc. No. 247, pp. 5-6). After a careful review of said documents, I find that this statement is an elaboration of and consistent with an opinion/ issue previously addressed in Dr. Smith's report. Thus, I do not find this declaration to be a new opinion. *Thompson v. Doane Pet Care Co.*, 470 F.3d 1201, 1203 (6th Cir. 2006) ("Section 26(a)(2)(B) does not limit an expert's testimony simply to reading his report. No language in the rule would suggest such a limitation. The rule contemplates that the expert will supplement, elaborate upon, explain

and subject himself to cross-examination upon his report."); *Lucent Tech., Inc. v. Gateway, Inc.,* 2007 U.S. Dist. LEXIS 36246, * 15 (May 16, 2007) (declaration permitted to be used where it is more detailed than report because it does not offer new opinions on the issues, but rather just elaborates on them). Therefore, this statement shall not be stricken.

The third opinion Optium objects to as new is the following:

[O]ther factors, such as return loss and individual manufacturing variations, also cause transmitters to vary individually in the amount of output power of the two tones required to obtain a given phase modulation index. These individual variations in lithium niobate modulators and transmitters require that commercial products be individually calibrated in order to obtain specified performance. A person of ordinary skill in the art in 1998 would have been aware of the variability of lithium niobate modulators, and would have understood that it is impossible to eliminate all laboratory measurements completely in a commercial product built to specified performance parameters.

(Doc. No. 233, p. 2, *citing*, Smith Dec., Doc. 247, ¶8). In response, Plaintiffs point to Dr. Smith's Rebuttal Expert report to show that this statement is not new. (Doc. No. 247, p. 3, 4-5, 7-8). After a careful review and comparison of the same, I agree with Plaintiffs that while Dr. Smith's declaration is not exactly what he stated in his report, it is an elaboration of points previously discussed. Consequently, this declaration will not be stricken.

The fourth opinion Optium objects to as new is the following:

Even in the absence of a customer specification, other known, objective elements of the system, such as the length and nature of the optical fiber (e.g., standard single-mode fiber or dispersion-shifted fiber) and optical noise level at the optical receiver, will determine the level of "optimum SBS suppression."

(Doc. No. 233, p. 2, *citing*, Smith Dec., Doc. 247, ¶10). To show that this statement is not new, Plaintiffs argue that Dr. Smith discussed the issue of Optium's expert's interpretation of "optimum SBS suppression." (Doc. No. 247, p. 5, *citing*, Doc. No. 247-4, p. 3). In addition, Plaintiffs point to the deposition of Dr. Smith during which Plaintiff's counsel questioned Dr. Smith about "optimum SBS suppression." (Doc. No. 247, pp. 5-6, *citing*, Doc. No. 247-10, p. 3). Finally, Plaintiffs argue

that this statement is permitted because it rebuts a contention that Optium did not put forward until its Motion for Summary Judgment. (Doc. No. 247, p. 6). I find these arguments persuasive. Therefore, this declaration shall not be stricken.

The fifth opinion Optium objects to as new is the following:

A system without feedback to stabilize tone powers, for example, might have a different level of 'optimum SBS suppression' than one with such feedback.

(Doc. No. 233, p. 2, *citing*, Smith Dec., Doc. 247, ¶10). To show that the statement is not new, Plaintiffs rely on Dr. Smith's Rebuttal Report. (Doc. No. 247-5, pp. 6-7). After a careful review and comparison of the same, I agree with Plaintiffs that while Dr. Smith's declaration is not exactly what he stated in his report, it is an elaboration of points previously discussed. Consequently, this declaration will not be stricken.

The sixth opinion Optium objects to as new is the following:

A person of ordinary skill in the art would further understand that applying more phase modulation than necessary to suppress SBS can degrade the received communication signal. For example, excess phase modulation combined with frequency dispersion in the optical fiber can cause composite second order distortion (CSO).

(Doc. No. 233, p. 2, *citing*, Smith Dec., Doc. 247, ¶11). I do not find the declaration should be stricken. The statement is not new, but an elaboration of the issue regarding knowledge and use of the noise floor as an indicator of the presence of SBS. (Doc. No. 247, pp. 7-8, *citing*, Doc. No. 247-3, p. 3; Doc. No. 247-3, pp. 7-8; Doc. No. 247-3, p. 4). Again, after a careful review and comparison of the same, I agree with Plaintiffs that while Dr. Smith's declaration is not exactly what he stated in his report, it is an elaboration of a point previously discussed. Consequently, this declaration will not be stricken.

In sum, I do not find that declaration of Dr. Smith to be an untimely "Supplemental Expert Report" as Optium argues. Thus, there was no need for Plaintiffs to seek leave to file a Supplemental Expert Report. Therefore, the Motion to Strike (Docket No. 232) is denied.

In the alternative, however, Optium requests that I reconsider my ruling of November 29, 2007, granting Plaintiffs' Motion to Strike Supplemental Expert Report and Testimony of Katherine Hall. (Doc. No. 233, pp. 5-6, *citing*, Doc. No. 176). The request is based on manifest injustice and equity because Optium believes it would be unfair to allow Dr. Smith's declaration to survive and not allow Katherine Hall's Supplemental Expert Report to survive. *Id.* at 6. I am not persuaded by this argument. There is no "manifest injustice" in applying the law and following the Rules. Unlike with Dr. Smith where he elaborates on previously discussed issues, Katherine Hall's Supplemental Expert Report raised new issues that had not been identified previously. Consequently, I find no basis to reconsider my previous ruling on November 29, 2007. As a result, Optium's alternative relief is denied.

C. MOTION FOR SUMMARY JUDGMENT

Optium moves for summary judgment of non-infringement, and partial summary judgment related to invalidity, notice, and convoyed sales. (Doc. No. 198). There is a two-part test to be applied in all patent infringement claims. *Dynacore Holdings Corp. v. U.S. Philips Corp.*, 363 F.3d 1263, 1273 (Fed. Cir. 2004). First, a court must engage in a claims construction. *Id., citing, Cybor Corp. v. FAS Techs., Inc.,* 138 F.3d 1448, 1454 (Fed. Cir. 1998)(*en banc*). Then, a court must compare the properly construed claims to the allegedly infringing device. *Id.* The claims have already been construed. (Docket Nos. 76, 86). Therefore, I must now engage in the second part of the two-part test.

1. Non-Infringement

Optium argues that it is entitled to summary judgment since its accused transmitters do not infringe because they are empirically tuned and the patents-in-suit disclaim empirical tuning. (Docket No. 213 pp. 8-16). To that end, Optium first submits that "[t]he empirical tuning in the specification applies to each of the asserted claims of the patents-in-suit." (Docket No. 213, p. 10).

Assuming, for purposes of summary judgment only, that Optium is correct that the "disclaimer of empirical tuning in the specification applies to each of the asserts claims of the patents-in-suit," I find that summary judgment is not appropriate because there is a genuine issue of material fact as to whether Optium's accused transmitters are empirically tuned. (Docket No. 223, ¶13; Docket No. 76-2, p. 3; 224, ¶¶5-9). Dr. Smith opines that Optium does not empirically tune its accused transmitters. *Id.* Consequently, summary judgment is not warranted on this basis.

2. Indefiniteness

Optium argues that the phrase "optimum SBS suppression" (and other similar terms)² found in claims 1 and 7 of the '003 patent and claim 35 of the '071 patent are invalid for indefiniteness. (Docket No. 213, pp. 17-27). Whether a claim is invalid for indefiniteness is a question of law for the court. *Datamize, LLC v. Plumtree Software, Inc.,* 417 F.3d 1342, 1347 (Fed. Cir. 2005); 4 Ann. Patent Digest §23:24. General claims construction principles apply to allegations of indefiniteness. *Id.* at 1348.³

According to the Supreme Court, "[t]he statutory requirement of particularity and distinctness in claims is met only when [the claims] clearly distinguish what is claimed from what went before in the art and clearly circumscribe what is foreclosed from future enterprise." The definiteness requirement, however, does not compel absolute clarity. Only claims "not amenable to construction" or "insolubly ambiguous" are indefinite. Thus, the definiteness of claim terms depends on whether those terms can be given any reasonable meaning. Furthermore, a difficult issue of claim construction does not ipso facto result in a holding of indefiniteness. "If the meaning of the claim is discernible, even though the task may be formidable and the conclusion may be one over which reasonable persons will disagree, we have held the claim sufficiently clear to avoid invalidity on indefiniteness grounds." In this regard it is important to note that an issued patent is entitled to a statutory

²Optium's reference to the phrase "optimum SBS suppression," applies equally to the phrase "that optimize SBS suppression." (Docket No. 213, p. 17, n. 12).

³"Intrinsic evidence in the form of the patent specification and file history should guide a court toward an acceptable claim construction. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed.Cir. 2005) (en banc). And while 'we have emphasized the importance of intrinsic evidence in claim construction, we have also authorized district courts to rely on extrinsic evidence,' such as expert testimony. *Id.* at 1317. In construing claims, 'what matters is for the court to attach the appropriate weight to be assigned to those sources in light of the statutes and policies that inform patent law.' *Id.* at 1324." *Datamize*, 417 F.3d 1348.

presumption of validity. "By finding claims indefinite only if reasonable efforts at claim construction prove futile, we accord respect to the statutory presumption of validity and we protect the inventive contribution of patentees, even when the drafting of their patents has been less than ideal." In this way we also follow the requirement that clear and convincing evidence be shown to invalidate a patent.

Datamize, 417 F.3d at 1347-48 (citations omitted). Thus, in determining whether a claim is sufficiently definite, courts look to whether one skilled in the art would understand the bounds of the claim when read in light of the specification, the prosecution history, and his knowledge of the relevant art area. *Halliburton Energy Servs, Inc. v. M-I LLC*, 514 F.3d 1244, 1249-50 (Fed. Cir. 2008).

In this case, Optium specifically argues that the phrase "optimum SBS suppression" is insolubly ambiguous, and thus, is indefinite under 35 U.S.C. §112.⁴ (Docket No. 213, pp. 17-27). I find am not persuaded by Optium's argument. To begin with, Optium argued in its Supplemental

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

A claim may be written in independent or, if the nature of the case admits, in dependent or multiple dependent form.

Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

A claim in multiple dependent form shall contain a reference, in the alternative only, to more than one claim previously set forth and then specify a further limitation of the subject matter claimed. A multiple dependent claim shall not serve as a basis for any other multiple dependent claim. A multiple dependent claim shall be construed to incorporate by reference all the limitations of the particular claim in relation to which it is being considered.

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

35 U.S.C.A. § 112.

⁴35 U.S.C. § 112 relates to "Specification" and provides as follows:

Claims Construction Brief that the proper place to address indefiniteness is at claims construction (as opposed to summary judgment stage). (Docket No. 74-2, p. 98). Throughout its Opening Claims Construction Brief, Optium submitted that various terms were indefinite. (Docket No. 62, pp. 2, 4, 14, 21, 30, and 37). In connection with the term "optimal SBS suppression" Optium submitted a definition for the term and, in the alternative, argued that the term was indefinite. (Docket No. 62, p. 21). The fact that Optium could first offer a definition cuts against any conclusion that the term is not amenable to construction.

Moreover, the issue of whether the term is indefinite was, in fact, argued and addressed at the claims construction phase. (Docket No. 62, pp. 21-23). The Special Master rejected that suggestion that the term was indefinite. "[T]here appears to be no dispute over what the term 'optimum SBS suppression' means *per se*. The meaning of that term is readily understood in light of the claims and specification." (Docket No. 76-2, p. 3) (underline emphasis added). Thereafter, he recommended "optimum SBS suppression" be construed as "the most advantageous level of SBS suppression for the system." *Id.* at 4. I adopted the Report and Recommendation of the Special Master and thereby adopted the Special Master's rejection of the suggestion that the term "optimum SBS suppression" is indefinite. (Docket No. 86). For the same reasons therein, I find the meaning of the term is readily apparent. Thus, the term is not insolubly ambiguous. I reject this argument again.

Additionally, I note that Optium's argument is also undercut by its own proposed use of the term "optimum" to construe other terms during claims construction. In particular, Optium suggested using, *inter alia*, the term "optimum" in defining the terms "controllably adjusting the power level of said first / second RF tone signal to a stabilized first / second RF tone power level" and "controllably adjusting power levels" in its Claim Construction Brief. (Docket No. 62, pp. 27-28).

Furthermore, the patentees shed light on the meaning and provide adequate guidance to persons of ordinary skill in the art to determine "optimum SBS suppression." "[T]he patentees here describe a method of mathematically determining optimum operating points, and disclose relatively 'finer' tuners capable of adjusting to those points." (Docket No. 76-2, p. 3). Furthermore, the "optimum SBS suppression' must be determined within the context of the particular 'optical communication system,' and is limited by the particular configuration of that system." *Id.* Plaintiffs' expert, Dr. David Smith, supports the same. (Docket No. 224, ¶10).

Finally, Optium filed a Supplemental Brief (Docket No. 239) addressing the applicability of the case of *Halliburton Energy Servs., Inc. v. M-I LLC,* 514 F.3d 1244 (Fed. Cir. 2008). First, Optium argues that *Halliburton* stands for the proposition that simply because a claim can be construed does not mean that it is definite because one skilled in the art still may not be able to discern the boundaries of the claim. (Docket No. 239, pp. 2-3). While this may be true as a principle of law in a vacuum, it does not apply to this case, where the Special Master rejected Optium's argument of indefiniteness at the claims construction phase and where Plaintiff's expert is able to discern the boundaries of the claim based on the construction of the term.

Second, Optium argues that the term "optimum SBS suppression" is indefinite based on *Halliburton* because there is no objective anchor to determine what constitutes "optimum SBS suppression." (Docket No. 239, p. 3). I disagree. As set forth above, "the patentees here describe a method of mathematically determining optimum operating points, and disclose relatively 'finer' tuners capable of adjusting to those points." (Docket No. 76-2, p. 3). Furthermore, the "optimum SBS suppression' must be determined within the context of the particular 'optical communication system,' and is limited by the particular configuration of that system." *Id*.

Third, Optium argues that under *Halliburton*, a term is indefinite where "'[w]hen a proposed construction requires that an artisan make a separate infringement determination for every set of

circumstances in which the composition may be used, and when such determinations are likely to result in differing outcomes (sometimes infringing and sometimes not), that construction is likely to be indefinite. " (Docket No. 239, p. 3, *citing, Halliburton,* 514 F.3d at 1255). When the evidence is viewed in the light most favorable to the non-moving party, such is not the case here. As Dr. Smith stated, a person of ordinary skill in the art would use the characteristics of the system to determine the "optimum SBS suppression." (Docket No. 224, ¶¶10-11); See, Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1576 (Fed. Cir. 1986) ("The claims were intended to cover the use of invention with various types of automobiles....As long as those of ordinary skill in the art realized that the dimensions could be easily obtained, §112, 2d ¶ requires nothing more. The patent law does not require that all possible lengths corresponding to the spaces in hundreds of different automobiles be listed in the patent, let alone that they be listed in the claims.").

Consequently, I find that Optium has failed to met the exacting standard of indefiniteness.

Therefore, summary judgment based on indefiniteness is not warranted.

3. <u>Pre-Suit Damages</u>

Optium argues that Plaintiffs cannot recover damages prior to the date the complaint was filed because Plaintiffs never marked their products and did not affirmatively notify Optium of its alleged infringement until the filing of the Complaint, and, therefore, summary judgment is appropriate in this regard. (Docket No. 213, pp. 27-30). In response, Plaintiffs do not dispute that they did not mark their products or that they never gave actual notice of infringement until they filed the Complaint on September 11, 2006. (Docket No. 222, pp. 26-29). Rather, they argue that it would have been futile to notify Optium of infringement of the '003 and'071 patents based on the prior history and unique relationship with JDSU. *Id.* Specifically, Optium argues that Gertel and Colyar, among others, as former JDSU employees, were involved with the design and sale of the ExMod transmitter. As such, Plaintiffs allege that they were excused from providing notice to

Optium. Id.

The relevant section of the United States Code relating to notice and damages is 35 U.S.C. §287, which provides, in pertinent part, as follows:

§287. Limitation on damages and other remedies; marking and notice

(a) Patentees, and persons making, offering for sale, or selling within the United States any patented article for or under them, or importing any patented article into the United States, may give notice to the public that the same is patented, either by fixing thereon the word "patent" or the abbreviation "pat.", together with the number of the patent, or when, from the character of the article, this can not be done, by fixing to it, or to the package wherein one or more of them is contained, a label containing a like notice. In the event of failure so to mark, no damages shall be recovered by the patentee in any action for infringement, except on proof that the infringer was notified of the infringement and continued to infringe thereafter, in which event damages may be recovered only for infringement occurring after such notice. Filing of an action for infringement shall constitute such notice.

35 U.S.C. §287(a). Neither the statute nor case law provides for an exception to §287 based on futility. Patent law requires that Plaintiffs affirmatively act by either marking their product or by giving actual notice of the infringement. 35 U.S.C. §287; Lans v. Digital Equipment Corp., 252 F.3d 1320, 1327-28 (Fed. Cir. 2001)("This court thus reiterates that actual notice under § 287(a) 'must be an affirmative act on the part of the patentee which informs the defendant of infringement.' Amsted Indus. [Inc. v. Buckeye Steel Castings Co.], 24 F.3d [178,] 187 [(Fed.Cir.1994)]. This rule follows prior decisions of this court and the Supreme Court, fulfills the purposes of § 287(a) by facilitating the alleged infringer's efforts to avoid continued infringement, and avoids troublesome determinations about the sufficiency of relationships between the notifier and the patentee.") Based on the same, I decline Plaintiffs' request to extend the futility exception to this case.

In this case, there is no dispute that the products were not marked and that the first affirmative notice given by Plaintiffs was the date of the filing of the Complaint. As a result, summary judgment in favor of Optium as to pre-Complaint damages is warranted.

4. Damages for Lost Convoyed Sales

Optium argues that it is entitled to summary judgment as to damages for lost convoyed sales of 1310 and QAM transmitters. (Docket No. 213, pp. 30-34). The "entire market value rule" ("EMVR") is used to determine whether component parts sold with a patented apparatus should be included in the damage computation for reasonable royalties or for lost profit purposes. *Rite-Hite Corp. v. Kelley Co. Inc.*, 56 F.3d 1538, 1549 (Fed.Cir.1998). Typically, the unpatented components and the patented components are physically part of the same machine, but also may include physically separated unpatented components. *Id.* at 1549-50.

A "convoyed sale" refers to the relationship between the sale of a patented product and a functionally associated non-patented product. A patentee may recover lost profits on unpatented components sold with a patented item, a convoyed sale, if both the patented and unpatented products "together were considered to be components of a single assembly or parts of a complete machine, or they together constituted a functional unit." *Rite-Hite Corp. v. Kelley Co. Inc.*, 56 F.3d 1538, 1550 (Fed.Cir.1998). "Our precedent has not extended liability to include items that have essentially no functional relationship to the patented invention and that may have been sold with an infringing device only as a matter of convenience or business advantage." *Id.* Damages on these items would exceed that which suitably compensates for the infringement. *Id.*

American Seating Co. v. USSC Group, Inc., 514 F.3d 1262, 1268 (Fed. Cir. 2008). Optium asserts that damages cannot be recovered for the 1310 and QAM transmitters under the EMVR because ExMods, 1310s and QAMs: 1) are not a "functional unit," or an "entire apparatus," and 2) need not and are not always sold together, and 3) because ExMods are not the basis for customer demand of the non patented transmitter. (Docket No. 213, pp. 30-34).

In response, Plaintiffs make two arguments. First, Plaintiffs argue that the they do not have to meet the EMVR test for convoyed products. (Docket No. 222, p. 22-23). "The basic test for causation that the *Rite-Hite* court applied to the ADL-100 is the proper methodology for determining the availability of damages related to the 1550nm Quadrature Amplitude Modulated ("QAM") transmitters and the 1310nm transmitters. Plaintiffs are entitled to these damages if it was reasonably foreseeable that Optium's infringement would cause Plaintiffs lost profits related to the

QAM and 1310 transmitters." (Docket No. 222, p. 22). To that end, Plaintiffs argue that the evidence "demonstrates that Optium could have reasonably foreseen that selling an infringing ExMod would cause JDSU (and, later Emcore) to lose sales of the QAM and 1310nm transmitters." (Docket No. 222, p. 25). After a review of *Rite-Hite*, I disagree with Plaintiffs. To the extent that Plaintiffs are seeking damages for unpatented components that are either part of the same machine or for unpatented and patented components that together constitute a functional unit, Plaintiffs must meet the EMVR test to recover the lost profits sought for those for convoyed sales. *Rite-Hite*, 56 F.3d at 1540-50; 2 IP Lit. Guide: Patents & Trade Secrets §20:5 (2008).

Next, Plaintiffs argue that even if the EMVR applies, summary judgment is not appropriate because the issue of lost convoyed sales is a question of fact for which there remains a genuine issue. (Docket No. 222, p. 20, 25-26). Specifically, Plaintiffs argue that there is a genuine issue as to whether the ExMod, QAM and 1310 transmitters constitute parts of a functional unit. (Docket No. 222, p. 25-26). I agree with Plaintiffs that functionality is typically a question of fact. *Rite-Hite*, 56 F.3d at 1543; *American Seating Co.*, 514 F.3d at 1266. Viewing the evidence in the light most favorable to Plaintiffs, there remains a genuine issue of material fact as to functionality. (Docket No. 223, ¶¶37, 39, 40, 41, and 48). Consequently, summary judgment is not appropriate.

IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF PENNSYLVANIA

EMCORE CORPORATION, JDS UNIPHASE CORPORATION,)
Plaintiffs,)
VS.) Civil Action No. 6-1202
OPTIUM CORPORATION,)
Defendant.)

AMBROSE, Chief District Judge

ORDER OF COURT

AND now, this 5th day of August, 2008, after careful consideration of the submissions of the parties, it is ordered that Defendant's Motion to Strike (Doc. No. 232) is denied, and Defendant's Motion for Summary Judgment (Doc. No. 189) is granted in part and denied in part as follows:

- 1. Summary judgment is granted in favor of Optium such that Plaintiffs may not recover pre-suit damages; and
- 2. Summary judgment is denied in all other respects.

BY THE COURT:

/s/ Donetta W. Ambrose
Donetta W. Ambrose
Chief U.S. District Judge